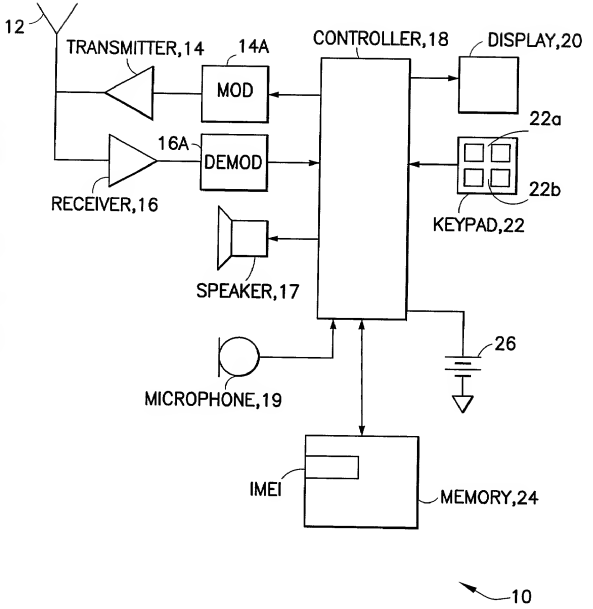
FIG. 1


12
TRANSMITTER,14
14A
CONTROLLER,18
DISPLAY,20
MOD
22a
16A
DEMOD
22b
RECEIVER,16
KEYPAD,22
SPEAKER,17
26
MICROPHONE,19
IMEI
MEMORY,24
10

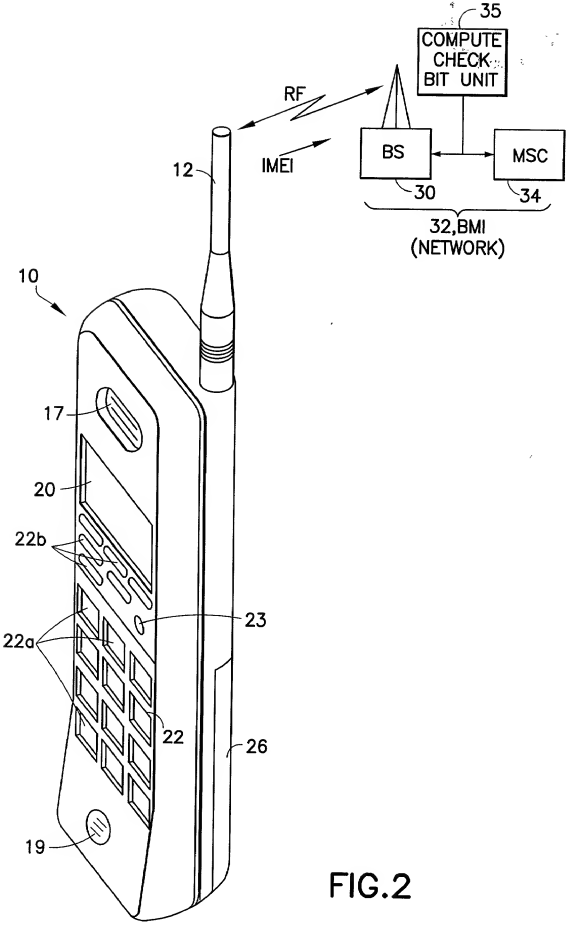

35
COMPUTE CHECK BIT UNIT
RF
IMEI
BS
MSC
30
34
32,BMI (NETWORK)
12
10
17
20
22b
22a
23
22
26
19

FIG.2

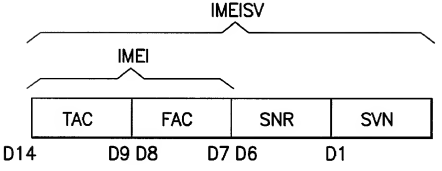

IMEISV
IMEI
TAC
FAC
SNR
SVN
D14
D9 D8
D7 D6
D1

FIG.3

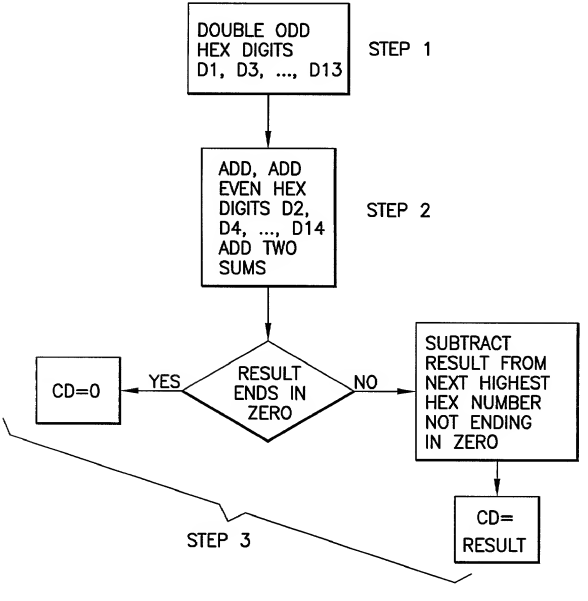

DOUBLE ODD HEX DIGITS D1, D3, ..., D13
STEP 1
ADD, ADD EVEN HEX DIGITS D2, D4, ..., D14 ADD TWO SUMS
STEP 2
RESULT ENDS IN ZERO
YES
NO
CD=0
SUBTRACT RESULT FROM NEXT HIGHEST HEX NUMBER NOT ENDING IN ZERO
CD= RESULT
STEP 3

FIG.4

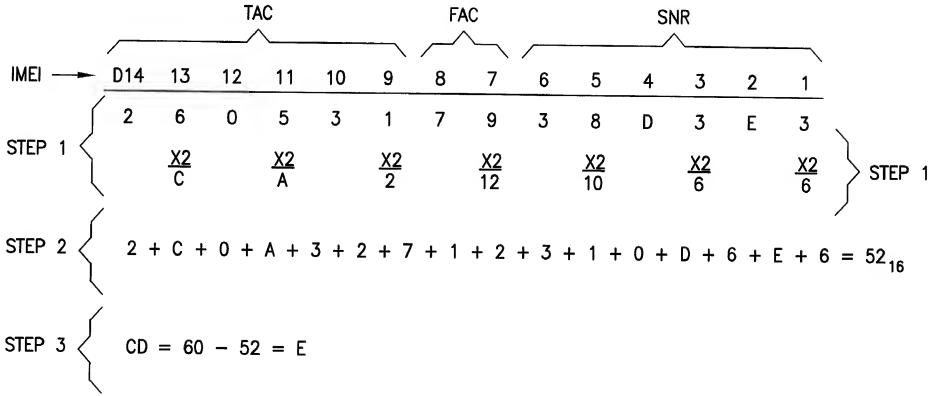

TAC
FAC
SNR
IMEI
D14 13 12 11 10 9 8 7 6 5 4 3 2 1
STEP 1
2 6 0 5 3 1 7 9 3 8 D 3 E 3
X2 C
X2 A
X2 2
X2 12
X2 10
X2 6
X2 6
STEP 1
STEP 2
2 + C + 0 + A + 3 + 2 + 7 + 1 + 2 + 3 + 1 + 0 + D + 6 + E + 6 = 52$_{16}$
STEP 3
CD = 60 − 52 = E

FIG.5